IN THE CLAIMS:

1. (Canceled)

2. (Currently Amended) A method as defined in claim 8, wherein during ~~the~~ a machining operation always those surface features which are computed for the current position of said hand instrument are superimposed over said video image, the current position of said hand instrument corresponding to a position of the implant within said cavity.

3. (Canceled).

4.-7. (Cancel).

8. (Currently Amended) A method of moving a hand instrument which includes a machining tool and a camera located at a specific distance from the machining tool to provide a cavity in a bone for a dental implant at a preparation site, comprising the following steps:

computing position-dependent surface features of a three-dimensional data set relating to a surface of an area at the preparation site relative to a desired position of the implant, the area in which the cavity is to be created being adjacent a tooth defining a horizon line and present in the form of a three-dimensional set of volume data;

detecting at least one section of the preparation site which exhibits a visible real surface feature by means of the camera on the hand instrument and a display providing a video image; and

superimposing a computed surface feature for a target position of said hand instrument such that altering the position and angle of said

hand instrument causes a change in the position of said superimposed surface feature relative to the visible real surface feature, and moving the hand instrument relative to the preparation site until the computed horizon line coincides with the horizon line of the adjacent tooth.

9. (New) A method as defined in claim 8, wherein the machining tool includes a tip whose distance from the camera is known, wherein the hand instrument transmits an image produced in the camera to said display, and wherein the computed horizon line is computed in an evaluating unit to enable the hand instrument to be controlled when creating or excavating a cavity in a bone to an end position wherein the computed horizon lines of an adjacent tooth coincides with the visible camera-generated horizon line of the tooth.